

JP920030321US1

IN THE CLAIMS:

Please cancel claims 1-16 without prejudice or disclaimer. Please add the following new claims.

1-16. (Canceled).

17. (New) A method for determining importance of semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, the method comprising:

determining a subjectivity score for each resource of a set of resources based on a number of Resource Description Format (RDF) triples of which said resource is a subject of and predefined weights of the properties of said triples;

determining an objectivity score for each said resource based on the number of RDF triples of which the resource is an object of and predefined weights of properties of the triples;

determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the parents of said classes; and

determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs.

18. (New) The method of claim 17, wherein said semantic web resources are represented as a first directed graph and resources are nodes in the graph, and properties of said semantic

JP920030321US1

web resources are links between nodes, and further wherein said subjectivity score and said objectivity score are determined based on a number of incoming and outgoing links for each node and a predefined weight of each link.

19. (New) The method of claim 18, wherein said semantic web resources are represented as a second directed graph in which classes are nodes, and class relationships are edges in the second graph, and said importance factor of parents of said class is determined in inverse proportion to a distance between nodes.
20. (New) The method of claim 18, further comprising:
determining path associations between semantic web resources by an existence of direct paths between respective nodes in said first directed graph; and
iteratively filtering said first directed graph by an importance of resources representing said nodes to determine paths in order of importance of vertices in the path.
21. (New) The method of claim 18, further comprising:
determining join associations between two semantic web resources by an existence of paths from respective nodes in the directed graph to a common end node or by an existence of paths to the respective nodes in the directed graph from a common start node; and
iteratively filtering said first directed graph by an importance of resources representing said nodes to determine paths in order of importance of vertices in the path.
22. (New) A computer program product for determining importance of semantic web resources, said resources being either a class or a non-class resource, and each non-class

JP920030321US1

resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, comprising a computer program on a storage medium, said computer program including:

code means for determining a subjectivity score for each resource of a set of resources based on a number of Resource Description Format (RDF) triples of which said resource is a subject of and predefined weights of the properties of said triples;

code means for determining an objectivity score for each said resource based on the number of RDF triples of which the resource is an object of and predefined weights of properties of the triples;

code means for determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the parents of said classes; and

code means for determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs.

23. (New) A method for determining path associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, said method comprising:

determining a subjectivity score for each resource of a set of resources based on predefined weight of each said link;

JP920030321US1

determining an objectivity score for each said resource based on the predefined weight of each said link;

determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of parents of said classes;

determining importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

determining path associations between semantic web resources by an existence of direct paths between respective nodes in said first directed graph; and

iteratively filtering the said first directed graph by an importance of the nodes to determine paths in order of importance of vertices in the path.

24. (New) A computer program product for determining path associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, comprising a computer program on a storage medium, said computer program including:

code means for determining a subjectivity score for each resource of a set of resources based on a predefined weight of each said link;

code means for determining an objectivity score for each said resource based on the predefined weight of each said link;

code means for determining an importance of a class resource from said subjectivity

JP920030321US1

score and objectivity score, and a factor relating to an importance of parents of said classes;
code means for determining importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

code means for determining path associations between semantic web resources by an existence of direct paths between respective nodes in said first directed graph; and

code means for iteratively filtering the said first directed graph by an importance of the nodes to determine paths in order of importance of vertices in the path.

25. (New) A method for determining join associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, said method comprising:

determining a subjectivity score for each resource of a set of resources based on a predefined weight of each said link;

determining an objectivity score for each said resource based on the predefined weight of each said link;

determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of parents of said classes;

determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

JP920030321US1

determining join associations between two semantic web by an existence of paths from the nodes in the directed graph to a common end node or by an existence of paths to the nodes in the directed graph from a common start node; and

iteratively filtering said first directed graph by an importance of a resource representing said nodes to determine paths in order of importance of vertices in the path.

26. (New) A computer program product for determining join associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, comprising a computer program on a storage medium, said computer program including:

code means for determining a subjectivity score for each resource of a set of resources based on a predefined weight of each said link;

code means for determining an objectivity score for each said resource based on the predefined weight of each said link;

code means for determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of parents of said classes;

code means for determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

code means for determining join associations between two semantic web resources by

JP920030321US1

an existence of paths from the nodes in the directed graph to a common end node or by an existence of paths to the nodes in the directed graph from a common start node; and

code means for iteratively filtering said first directed graph by an importance of the nodes to determine paths in order of importance of vertices in the path.

27. (New) A system for determining importance of semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, the system comprising:

means for determining a subjectivity score for each resource of a set of resources based on a number of Resource Description Format (RDF) triples of which said resource is a subject of and predefined weights of the properties of said triples;

means for determining an objectivity score for each said resource based on the number of RDF triples of which the resource is an object of and predefined weights of properties of the triples;

means for determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the parents of said classes; and

means for determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs.

28. (New) A system for determining path associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or

JP920030321US1

more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, said system comprising:

means for determining a subjectivity score for each resource of a set of resources based on a predefined weight of each said link;

means for determining an objectivity score for each said resource based on the predefined weight of each said link;

means for determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of parents of said classes;

means for determining importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

means for determining path associations between semantic web resources by an existence of direct paths between respective nodes in said first directed graph; and

means for iteratively filtering said first directed graph by an importance of the nodes to determine paths in order of importance of vertices in the path.

29. (New) A system for determining join associations between two semantic web resources, said resources being either a class or a non-class resource, and each non-class resource belonging to one or more classes, and each class resource being a subclass of one or more parent classes, said semantic web being represented as a first directed graph and resources are nodes in the graph, and properties of said semantic web are links between nodes, said system comprising:

means for determining a subjectivity score for each resource of a set of resources

JP920030321US1

based on a predefined weight of each said link;

means for determining an objectivity score for each said resource based on the predefined weight of each said link;

means for determining an importance of a class resource from said subjectivity score and objectivity score, and a factor relating to an importance of parents of said classes;

means for determining an importance of a non-class resource from said subjectivity score and objectivity score, and a factor relating to an importance of the classes to which the resource belongs;

means for determining join associations between two semantic web by an existence of paths from the nodes in the directed graph to a common end node or by an existence of paths to the nodes in the directed graph from a common start node; and

means for iteratively filtering the said first directed graph by an importance of a resource representing said nodes to determine paths in order of importance of vertices in the path.